María Ortiz de Zúñiga López-Chicheri has been working in fusion for almost 20 years, in the management and engineering of complex nuclear fusion components, closely linked to the ITER project.

She currently holds the management role of F4E Head of unit for Project Engineering, CAD and Technical Data management, as well as the chair of the ITER AI Joint Project and the lead of AI for engineering at F4E. She is a strong advocate of using this new technology to accelerate design, quality and speed of manufacturing processes in reactor construction, defending the concept of “co-intelligence” where AI assists the human and the person always keeps control and final supervision.

Since 2007, she has held several leadership roles at Fusion for Energy (F4E), the EU agency responsible for the European contribution to ITER. Her career at F4E includes serving as Deputy Program Manager for the Antennas (electron cyclotron and ion cyclotron heating systems), and Programme and Project Manager for the European ITER Vacuum Vessel sectors 3, 2, and 9, one of the most complex and essential components of the Tokamak reactor.

She holds two Master of Engineering degrees, one in Mechanical Engineering specialized in Advanced Manufacturing Technologies and another in Computer Engineering from the University of Comillas - ICAI. She is currently a PhD candidate at the Universidad Nacional de Educación a Distancia (UNED), focusing her research on the application of data analysis and Artificial Intelligence to improve the manufacturing of fusion components.

María Ortiz de Zúñiga has represented F4E in the RCC-MRx subcommittee. She has received the Best Research Award in Fusion by the SNE, the ITER Star Award for Excellence, and ASME certificates of appreciation, among others. She is an active member of various international scientific committees and a reviewer for international conferences and organizations, such as the EU AI Office, the European Conference on AI, the American Society of Mechanical Engineers PVP, the IAEA and various high-impact fusion journals. She is a member of the Spanish Nuclear Society, the Canadian Nuclear Society, and the American Society of Mechanical Engineers.